



**U.S. Department of Energy
Technical Qualification Program**

Occupational Safety Qualification Standard

Study Guide

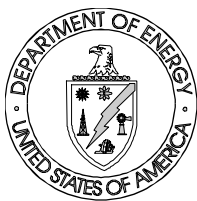
<p>Section 2.0 Regulatory</p>
--

April 1996



Competency 2.1 Occupational safety personnel shall demonstrate a working level knowledge of occupational safety-related requirements of Department of Energy (DOE) Orders such as the following:

- DOE 3790.1B, Federal Employee Occupational Safety and Health Program
- DOE 3791.2A, Federal Employee Motor Vehicle Safety Program
- DOE 4330.4A, Maintenance Management Program
- DOE 4700.1, Project Management System
- DOE 5000.3B, Occurrence Reporting and Processing of Operations Information
- DOE 5480.1B, Environment, Safety and Health Program for Department of Energy Operations
- DOE 5480.3, Safety Requirements for the Packaging and Transportation of Hazardous Materials, Hazardous Substances, and Hazardous Wastes
- DOE 5480.4, Environmental Protection, Safety, and Health Protection Standards
- DOE 5480.5, Safety of Nuclear Facilities
- DOE 5480.7A, Fire Protection
- DOE 5480.8A, Contractor Occupational Medical Program
- DOE 5480.9A, Construction Project Safety and Health Management
- DOE 5480.10, Contractor Industrial Hygiene Program
- DOE 5480.19, Conduct of Operations Requirements for DOE Facilities
- DOE 5480.20, Personnel Selection, Qualification, Training, and Staffing Requirements at DOE Reactor and Non-Reactor Nuclear Facilities
- DOE 5480.23, Nuclear Safety Analysis Reports
- DOE 5480.29, Employee Concerns Management System
- DOE 5481.1B, Safety Analysis and Review System
- DOE 5482.1B, Environment, Safety and Health Appraisal Program
- DOE 5483.1A, Occupational Safety and Health Program for DOE Contractor Employees
- DOE 5484.1, Environmental Protection, Safety, and Health Protection Information Reporting Requirements
- DOE 5500.1B, Emergency Management System Emergency Categories, Classes, and Notification and Reporting Requirements
- DOE 5500.3A, Planning and Preparedness for Operational Emergencies



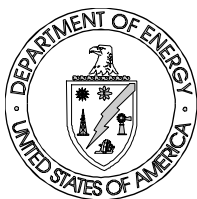
1. Supporting Knowledge and Skills

- a. Discuss the purpose, responsibilities, and requirements of Department of Energy Orders with respect to occupational safety.
- b. Discuss the compatibility between, and describe the respective applicability of, the occupational safety requirements contained in Department of Energy Orders and applicable local, State, or Federal regulations.
- c. Discuss the relationship that exists between Department of Energy Orders and Occupational Safety and Health Administration Standards.
- d. Discuss appropriate or required measures for obtaining interpretations of, or variances/exemptions from, occupational safety requirements in Department of Energy Orders.

2. Self-Study Activities (corresponding to the intent of the above competency)

- NOTES:
- The DOE Orders are in a state of transition. Please refer to the following gopher site for a cross reference of new and old Orders:
gopher://VM1.HQADMIN.DOE.GOV:70/00/doemenu1/directiv/251cross.asc
 - Below are three web sites containing many of the references you may need.

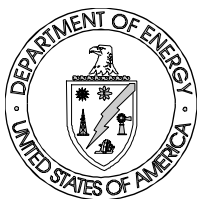
Web Sites		
Organization	Site Location	Notes
Department of Energy	http://cted.inel.gov/cted/index.htm	DOE Standards, Guides, and Orders.
OSHA	http://www.osha-slc.gov/	OSHA documents and search engine
U.S. House of Representatives	http://law.house.gov/cfr.htm	Searchable Code of Federal Regulations



Section 2.0

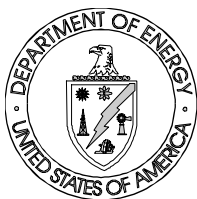
Review the following matrix of DOE orders and then proceed to the exercises that follow.

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 3790.1B, <i>Federal Employee Occupational Safety and Health Program</i>	Establishes DOE Occupational Safety and Health Program.	Federal employees	<ul style="list-style-type: none"> Provides for a safe workplace. Assures employee participation in an Occupational Safety and Health Program. Establishes programs for safety and health training. Assures employee reporting of unsafe or unhealthful working conditions. Complies with OSHA 1910. Complies with 29 CFR part 1960.
DOE 3791.2A, <i>Federal Employee Motor Vehicle Safety Program</i>	Establishes minimum licensing requirements for DOE employees operating government-owned or -leased motor vehicles and powered industrial equipment.	DOE employees who are regularly required to operate motor vehicles and powered industrial equipment.	<ul style="list-style-type: none"> The Office of Personnel Management (OPM) regulations, standards, and procedures dealing with motor vehicle operator requirements are to be followed except as supplemented by this Order. Each employee operating or riding in a government-owned vehicle shall wear his or her seat belt at all times.
DOE 4330.4B, <i>Maintenance Management Program</i>	Provides general policy and objectives for the management and performance of cost-effective maintenance and repair of DOE property.	DOE, DOE contractors, and subcontractors	<ul style="list-style-type: none"> Describes the requirements for reporting and processing of occurrences related to: safety, health, security, property, operations, environment, and emergencies. Develops a cost-effective maintenance program. Evaluates maintenance program performance and effectiveness. Complies with environmental, safety, and health standards.



Section 2.0

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 4700.1, <i>Project Management System</i>	Establishes the DOE project management system.	DOE and DOE contractors	<ul style="list-style-type: none"> Provides implementing instructions, formats, and procedures. Sets principles and requirements that govern the development, approval, and execution of DOE's outlay program acquisitions as embodied in the project management system (PMS).
DOE 5000.3B, <i>Occurrence Reporting and Processing of Operations Information</i>	Establishes a system for reporting operations information related to DOE-owned or -operated facilities and processing that information to provide for appropriate corrective action.	DOE and DOE contractors	DOE policy to ensure timely identification, categorization, notification, and reporting to DOE management of all reportable occurrences at DOE-operated facilities or DOE-owned, contractor-operated facilities.
DOE 5480.1B, <i>Environment, Safety and Health Program for Department of Energy Operations</i>	Establishes ES&H Program for DOE operations.	DOE and DOE contractors	<ul style="list-style-type: none"> Assures that contractors execute ES&H program elements. Complies with mandatory requirements relating to ES&H. Appraises programs in accordance with DOE 5482.1B and other DOE 5480 series orders. Prepares implementation plans for this Order and other DOE 5480 series orders. Maintains liaison with regional, state, or local official on ES&H requirements. Processes requests for exceptions and variances.



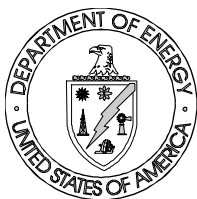
Section 2.0

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 5480.3, <i>Safety Requirements for the Transportation of Hazardous Materials, Hazardous Substances, and Hazardous Wastes</i>	Establishes requirements for the packaging and transportation of hazardous materials, hazardous substances, and hazardous wastes.	DOE and DOE contractors	<ul style="list-style-type: none"> Complies with this Order, federal regulations, and the applicable safety regulations of the Department of Transportation (DOT). Follows applicable packaging standards of the Nuclear Regulatory Commission (NRC) (10 CFR 71).
DOE 5480.4, <i>Environmental Protection, Safety, and Health Protection Standards</i>	Specifies and provides requirements for the mandatory (ES&H) standards applicable to DOE and DOE contractor operations; provides a listing of reference ES&H standards; and identifies the sources of the mandatory and reference ES&H standards.	DOE and DOE Contractors	<ul style="list-style-type: none"> Provides a listing of reference ES&H standards. Identifies the sources of the mandatory and reference standards.
DOE 5480.19, <i>Conduct of Operations Requirements For DOE Facilities</i>	Provides requirements and guidelines for departmental elements used in developing directives, plans, and/or procedures relating to the conduct of operations at DOE facilities.	DOE and DOE contractors	<ul style="list-style-type: none"> Operations at DOE facilities will be managed, organized, and conducted in a manner to ensure an acceptable level of safety. Operators at DOE facilities have procedures in place to control the conduct of operations. Line organizations review existing and planned programs important to safe and reliable facility operations. Line organizations assess the effectiveness of corporate directives, plans, or procedures at facilities under their cognizance.



Section 2.0

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 5480.23, <i>Nuclear Safety Analysis Reports</i>	Establishes requirements for contractors responsible for the design, construction, operation, decontamination, or decommissioning of nuclear facilities to develop safety analyses that establish and evaluate the adequacy of the safety basis of the facilities.	DOE, DOE contractors, and subcontractors covered under the following contract clauses: <ul style="list-style-type: none">• Safety and Health (DEAR 970.5204-2)• Nuclear Facility Safety (DEAR 970.5204-26)• Radiation Protection and Nuclear Criticality (DEAR 952.223-72)• Other clauses under DNSFB	<ul style="list-style-type: none">• Contractors shall perform a safety analysis to include:<ul style="list-style-type: none">– A graded approach for the level of analysis.– The scope and content of Safety Analysis Reports (SAR).– Hazard classification for nuclear facilities and operations.– Document control.



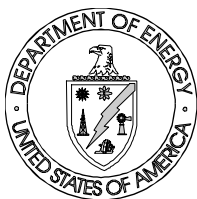
Section 2.0

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 5480.29, <i>Employee Concerns Management System</i>	Creates the framework for promptly identifying, reporting, and resolving employee concerns regarding DOE facilities or operations.	DOE, DOE contractors, and subcontractors	<ul style="list-style-type: none"> Provides for the necessary prioritization, evaluation, and resolution of employee concerns. Provides for effective communication methods for ensuring that employees are aware of the program. Establishes a formal and measurable tracking system of employee concern status. Maintains a secure filing system. Ensures that originator can be informed of the status and disposition of concern. Maintains a 24-hour telephone capability. Ensures distribution of copies of ES&H and nuclear safety concerns. Guards the anonymity or confidentiality of the employee. Provides for the review and evaluation of an employee's concern.
DOE 5481.1B, <i>Safety Analysis and Review System</i>	Establishes uniform requirements for the preparation and review of safety analyses of DOE operations.	DOE and DOE contractors	<ul style="list-style-type: none"> Assures the protection of the environment and the health and safety of the public. Provides for a safe and healthful workplace. Protects government property. Assures compliance with applicable statutory requirements. Ensures quality assurance.



Section 2.0

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 5482.1B, <i>Environment, Safety, and Health Appraisal Program</i>	Establishes the ES&H Appraisal Program for DOE.	DOE and DOE contractors	<ul style="list-style-type: none">• Factors for ES&H Appraisals:<ul style="list-style-type: none">– Management Directives– Policies, Standards, Permits, and Licenses– Organization and Administration– Staffing– Training– Communication– Documentation– Incident and Accident Reporting– Planning, Budgeting, and Spending– ES&H Appraisal Programs– ES&H Evaluation of Current and Planned Facilities and Programs– Performance



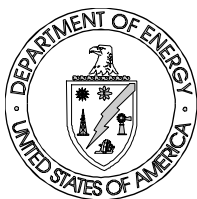
Section 2.0

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 5483.1A, <i>Occupational Safety and Health Program for DOE Contractor Employees</i>	Establishes requirements and procedures for DOE contractor employees consistent with the protection afforded private industry employees by OSHA.	DOE and DOE contractors subject to DOE Procurement Regulation (PR) 9-50.704-2(a) and DOE PR 9-50.704-2(b)	<p>Contractors are to:</p> <ul style="list-style-type: none"> • Provide a safe workplace. • Establish and implement programs and procedures in support of this Order to ensure: <ul style="list-style-type: none"> – Employee participation in occupational safety and health programs. – Compliance with DOE-prescribed OSHA standards. – Workplace monitoring for known toxic substances and harmful physical agents. – That requests for variances or exceptions from the DOE-prescribed OSHA standards are in accordance with Chapter I. – That contractor employees are fully informed of their rights, protections, obligations, and responsibilities as required by Chapter I. – That compliance inspections are conducted using the inspection procedures of Chapter I as general guidelines. – That safety and health complaints are investigated promptly and resolved equitably according to the requirements of Chapter II. – That employees who file complaints are not discriminated against, as required by Chapter III



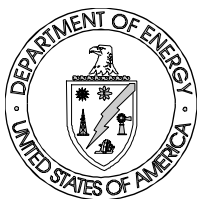
Section 2.0

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 5483.1A, <i>Occupational Safety and Health Program for DOE Contractor Employees</i> (continued)			<ul style="list-style-type: none"> – That occupational safety and health records and information are maintained and posted as prescribed by Chapter III. – That accident investigations are conducted as required by Chapter III.
DOE 5480.5, <i>Safety of Nuclear Facilities</i>	Establishes the nuclear facility safety program.	DOE and DOE contractors	<ul style="list-style-type: none"> • Program requirements ensure that: <ul style="list-style-type: none"> – Nuclear facilities are sited, designed, constructed, modified, operated, maintained, and decommissioned in accordance with uniform standards, guides, and codes. – Radioactive and fissionable materials are produced, processed, stored, transferred, or handled in such a manner that the probability of an accident is acceptably low. – ES&H program requirements are in compliance. – Consideration is given to all potential criticality hazards. – Government property and essential operations are protected.



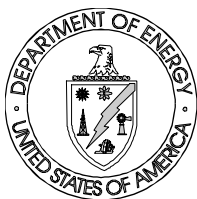
Section 2.0

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 5480.7A, <i>Fire Protection</i>	Establishes requirements for a comprehensive fire protection and related perils protection program sufficient to attain DOE objectives.	DOE and DOE contractors	<ul style="list-style-type: none"> • Fire Protection Criteria <ul style="list-style-type: none"> – A documented Fire Protection Program • Assessments <ul style="list-style-type: none"> – Documented evaluations of the fire protection program <ul style="list-style-type: none"> <input type="checkbox"/> Fire Hazard Analyses <input type="checkbox"/> Life Safety <input type="checkbox"/> Automatic Fire Protection <input type="checkbox"/> Redundant Fire Protection <input type="checkbox"/> Testing and Maintenance <input type="checkbox"/> Quality Construction
DOE 5480.8, <i>Contractor Occupational Medical Program</i>	Establishes minimum occupational medical program requirements.	DOE and DOE contractors	<ul style="list-style-type: none"> • A written occupational medical plan for each installation. • Maintenance of a healthful work environment. • Minimum requirements for employee health examinations. • Minimum scope and content of the comprehensive health examination. • Guides for the interim health status examination.



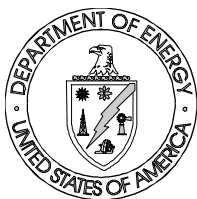
Section 2.0

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 5480.9A, <i>Construction Project Safety and Health Management</i>	Establishes specific requirements for the management of occupational safety and health (OSH) on DOE construction projects.	DOE, DOE contractors, and subcontractors	<ul style="list-style-type: none"> • Develops local instructions for implementation of this Order. • Ensures that project managers are trained. • Ensures that construction project acquisition documents include provisions that allow for noncompensable work stoppages. • Reviews safety and health programs. • Reviews and approves construction contractor evaluations.
DOE 5480.20A, <i>Personnel Selection, Qualification and Training Requirements For DOE Nuclear Facilities</i>	Establishes selection, qualification, and training requirements for management and operating (M&O) contractor personnel involved in the operation, maintenance, and technical support of DOE-owned Category A and B reactors and nonreactor nuclear facilities.	DOE elements and DOE contractors that are responsible for operable DOE-owned Category A and B reactors and nonreactor facilities	<ul style="list-style-type: none"> • Delineates general and specific requirements that apply to M&O contractor operating organization personnel. • Chapter I contains requirements for training and qualification of personnel. • Chapters II, III, and IV contain requirements for personnel at DOE Category A production, test, and research reactors, Category B reactors, and nonreactor nuclear facilities. • Evaluations and qualification programs conducted using DOE-STD-1070-94.



Section 2.0

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 5484.1, <i>Environmental Protection, Safety, and Health Protection Information Reporting Requirements</i>	Establishes requirements and procedures for the reporting of information having environmental protection, safety, or health protection significance for DOE operations.	DOE and DOE contractors	<ul style="list-style-type: none"> Objectives of the information reporting system are: <ul style="list-style-type: none"> To investigate and evaluate occurrences. To obtain early, complete, and factual information on occurrences. To ensure the gathering of adequate information on which to base management action. To provide a basis for the improvement of codes, guides, and standards. To establish a procedure for the development and reporting of occupational radiation exposure information to the Radiation Records Repository. To monitor, evaluate, and report onsite discharges, liquid and airborne effluents, and environmental conditions.
DOE 5500.1C (Draft), <i>Emergency Management System</i>	Establishes overall policy and assigns and describes roles and responsibilities for DOE Emergency Management System.	DOE and DOE contractors	<ul style="list-style-type: none"> DOE Emergency Management System shall provide the framework for comprehensive and integrated planning, preparedness, and response activities for all emergencies involving or affecting DOE or requiring DOE assistance.



Section 2.0

DOE Order	Purpose	Scope/Applicability	Requirements/Key Words
DOE 5500.3A, <i>Planning and Preparedness For Operational Emergencies</i>	Establishes requirements for planning and preparedness for Operational Emergencies involving DOE or requiring DOE assistance.	DOE and DOE contractors	<ul style="list-style-type: none"> This Order identifies 13 elements for an emergency management program: <ul style="list-style-type: none"> Emergency Response Organization Offsite Response Interfaces Operational Emergency Event Classes Notification Consequences Assessment Protective Actions Medical Support Recovery and Reentry Public Information Emergency Facilities and Equipment Training Drills and Exercises Program Administration

EXERCISE 2-1.A Using the matrix and DOE orders as references, state the purpose and general requirements for each DOE Order.

Read DOE Order 5483.1A, *Occupational Safety and Health Program for DOE Contractor Employees at Government-Owned, Contractor-Operated (GOCO) Facilities*

EXERCISE 2.1-B Referring to DOE Order 5483.1A, *Occupational Safety and Health Program for Contractor Employees at GOCO Facilities*, state the DOE-prescribed OSHA Standards with which GOCO facility contractors must comply.

EXERCISE 2.1-C Referring to DOE Order 5483.1A, *Occupational Safety and Health Program for Contractor Employees at GOCO Facilities*, state the content requirements for applying for a temporary and/or permanent variance or exception to the DOE-prescribed OSHA standards.

3. Summary



Refer to the matrix of DOE Orders found in Section 2 of this study guide.

4. Exercise Solutions

EXERCISE 2-1.A Using the matrix and DOE orders as references, state the purpose and general requirements for each DOE Order.

ANSWER 2-1.A Review each of the above DOE orders for the purpose statement and general requirements/key words.

EXERCISE 2.1-B Referring to DOE Order 5483.1A, *Occupational Safety and Health Program for Contractor Employees at GOCO Facilities*, state the DOE-prescribed OSHA Standards with which GOCO facility contractors must comply.

ANSWER 2.1-B GOCO contractors shall comply with the following DOE-prescribed OSHA standards:

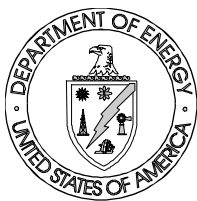
- a. "Occupational Safety and Health Standards," Title 29 CFR Part 1910
- b. "Safety and Health Regulations for Construction," Title 29 CFR Part 1926
- c. "Occupational Safety and Health Standards for Shipyard Employees," Title 29 CFR Part 1915
- d. "Safety and Health Regulation for Longshoring," Title 29 CFR Part 1918
- e. "Occupational Safety and Health Standards for Agriculture," Title 29 CFR Part 1928



Section 2.0

EXERCISE 2.1-C Referring to DOE Order 5483.1A, *Occupational Safety and Health Program for Contractor Employees at GOCO Facilities*, state the content requirements for applying for a temporary and/or permanent variance or exception to the DOE-prescribed OSHA standards.

ANSWER 2.1-C DOE Order 5483.1A
Chapter I - "Standards, Instructions, and Inspections"
Section 4. "Variance and Exception Request, Evaluation, and Response Procedures"
See subparagraph 4a. "Temporary Variances," subparagraph 4b. "Permanent Variances," and subparagraph 4c. "Exceptions."



Section 2.0

Competency 2.2 Occupational Safety personnel shall demonstrate a working level knowledge of the organization and application of Occupational Safety and Health Administration Regulations.

1. Supporting Knowledge and Skills

Scan the listed documents.

- 29 CFR 1904, *Recording and Reporting Occupational Injuries*
- 29 CFR 1910, *Occupational Safety and Health Standards*
- 29 CFR 1915, *Shipyard Employment*
- 29 CFR 1917, *Marine Terminals*
- 29 CFR 1918, *Safety and Health Regulations for Longshoremen*
- 29 CFR 1926, *Safety and Health Regulations for Construction*
- 29 CFR 1928, *Occupational Safety and Health Standards for Agriculture*

NOTE: The list of CFRs above are a representative sample of CFRs and are not included for the information content.

2. Self-Study Activities (corresponding to the intent of the above competency)

NOTE: Below are three web sites containing many of the references you may need.

Web Sites		
Organization	Site Location	Notes
Department of Energy	http://cted.inel.gov/cted/index.htm	DOE Standards, Guides, and Orders.
OSHA	http://www.osha-slc.gov/	OSHA documents and search engine
U.S. House of Representatives	http://law.house.gov/cfr.htm	Searchable Code of Federal Regulations

EXERCISE 2.2-A Using the documents as needed, state their purpose, scope, and application.



Section 2.0

Read 29 CFR 1910, *Occupational Safety and Health Standards*, "Explanation," page v.

EXERCISE 2.2-B Discuss the organization of the *Code of Federal Regulations* and the *Federal Register* in terms of titles, chapters, parts, and sections.

Read 29 CFR 1910, *Occupational Safety and Health Standards*, "Explanation," page v.

EXERCISE 2.2-C Discuss the relationship between the *Code of Federal Regulations* and the *Federal Register* in terms of determining the latest version of any rule.

EXERCISE 2.2-D Discuss the methodology for determining whether a *Code of Federal Regulations* volume has been amended by using the *List of CFR Sections Affected (LSA)* and the "Cumulative List of Parts Affected."

Read 29 CFR 1990.133, 1990.141 and 1990.147.

EXERCISE 2.2-E Discuss the differences between Requests for Information, Advanced Notice of Proposed Rulemaking (ANPR), Notice of Proposed Rulemaking (PR), and a Final Rule as they relate to regulatory entries in the *Federal Register*.

3. Summary

The *Code of Federal Regulations* (CFR) sets the legal requirements for various actions for which the DOE employee may be held liable. Requirements under the CFR have the impact of federal law. As a DOE employee, you need to know how to use both the CFR and the *Federal Register* in order to find the latest or newest version of the requirements they contain.



4. Exercise Solutions

EXERCISE 2.2-A Using the documents as needed, state their purpose, scope, and application.

- ANSWER 2.2-A
- 29 CFR 1904 establishes recordkeeping and reporting requirements for occupational injuries and illnesses.
 - 29 CFR 1910 establishes OSHA standards based on national consensus.
 - 29 CFR 1915 establishes OSHA standards for shipyard employees and any related employees.
 - 29 CFR 1917 applies to employment within marine terminal and activities within or associated with marine terminals.
 - 29 CFR 1918 establishes safety and health standards for long shoring activities with the intent to carry out Public Law 85-742.
 - 29 CFR 1926 establishes safety and health standards for construction under Section 107 of the *Construction Work Hours and Safety Standards Act*.
 - 29 CFR 1928 establishes OSHA standards for agricultural operations.

EXERCISE 2.2-B Discuss the organization of the *Code of Federal Regulations* and the *Federal Register* in terms of titles, chapters, parts, and sections.

ANSWER 2.2-B The CFR is divided into 50 titles which represent broad areas subject to federal regulation. Each title is divided into chapters that usually bear the name of the issuing agency. Each chapter is further subdivided into parts covering specific regulatory areas. Parts are subdivided into sections.

EXERCISE 2.2-C Discuss the relationship between the *Code of Federal Regulations* and the *Federal Register* in terms of determining the latest version of any rule.

ANSWER 2.2-C The *Code of Federal Regulations* is kept up to date by the individual issues of the *Federal Register*. The two publications must be used together to determine the latest version of any given rule.



Section 2.0

EXERCISE 2.2-D Discuss the methodology for determining whether a *Code of Federal Regulations* volume has been amended by using the *List of CFR Sections Affected (LSA)* and the "Cumulative List of Parts Affected."

ANSWER 2.2-D To determine whether a CFR volume has been amended since its revision date (on the front cover), consult the *List of CFR Sections Affected (LSA)*, which is issued monthly, and the "Cumulative List of Parts Affected", which appears in the "Reader's Aid" section of the daily *Federal Register*. These two lists will identify the *Federal Register* page number of the latest amendment of any given rule.

EXERCISE 2.2-E Discuss the differences between Requests for Information, Advanced Notice of Proposed Rulemaking (ANPR), Notice of Proposed Rulemaking (PR), and a Final Rule as they relate to regulatory entries in the *Federal Register*.

ANSWER 2.2-E Using the process for adding a substance to the list of carcinogens (substances that may cause cancer), a Request for Information (ROI) may published in the *Federal Register* requesting information concerning the proposal. (Other sources and methods for gathering information are also used. Information can be submitted voluntarily by manufacturers, research groups, colleges, etc., or can be requested from specific subject matter experts by OSHA, and an ROI is not published.)

The Advance Notice of Proposed Rulemaking is published within 30 days after OSHA initiates a study concerning the feasibility of specific standards for a potential carcinogen. Actual rulemaking begins with the Secretary of Energy publishing a Notice of Proposed Rulemaking in the *Federal Register*, providing a 60-day comment period.

After hearings are held and a decision is made, there is a 120-day period in which the results must be published in the *Federal Register*; either a final rule, a statement that a final rule will be issued in the future, or a statement that a final rule will NOT be issued and any reasons for the nonissuance will be published.



Competency 2.3 Occupational safety personnel shall demonstrate a familiarity level of knowledge with the following:

- **29 CFR 1910, Occupational Safety and Health Standards, Subpart Z - Toxic and Hazardous Substances (1910.1000 through 1910.1048)**
- **29 CFR 1926, Safety and Health Regulations for Construction, Subpart Z - Toxic and Hazardous Substances**
- **American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) for chemical substances and Physical Agents and Biological Exposure Indices (herein after referred to as the ACGIH TLV Booklet)**

1. Supporting Knowledge and Skills

- a. Discuss the terminology necessary to interpret criteria presented in:
 - 29 CFR 1910, Subpart Z, Tables Z-1, Z-2, and Z-3
 - 29 CFR 1910, Subpart Z expanded health standards
 - The ACGIH TLV Booklet
- b. Discuss the respective applicability of overlapping or inconsistent requirements of 29 CFR 1910, Subpart Z, and the ACGIH TLV Booklet.
- c. Discuss the applicability of criteria for any of the toxic and hazardous substances listed in the above documents.
- d. Locate and identify applicable control measures for any of the toxic and hazardous substances listed in the above documents.
- e. Locate and identify emergency response measures for any of the toxic and hazardous substances listed in the above documents.

**2. Self-Study Activities (corresponding to the intent of the above competency)**

NOTE: Below are three web sites containing many of the references you may need.

Web Sites		
Organization	Site Location	Notes
Department of Energy	http://cted.inel.gov/cted/index.htm	DOE Standards, Guides, and Orders.
OSHA	http://www.osha-slc.gov/	OSHA documents and search engine
U.S. House of Representatives	http://law.house.gov/cfr.htm	Searchable Code of Federal Regulations

Scan 29 CFR 1910, Subpart Z, Tables Z-1, Z-2, and Z-3. **Read** 1910.1000.

EXERCISE 2.3-A What is the significance of a chemical which is preceded by a "C?"

EXERCISE 2.3-B Using 29 CFR 1910, Tables Z-1, 2, and 3, define ppm, mg/m³, and mppcf.

EXERCISE 2.3-C Using 29 CFR 1910, Table Z-2, what is the Acceptable Maximum Peak (above the acceptable ceiling concentration for an 8-hour shift) for hydrogen sulfide?

Read 29 CFR 1910, Appendix B, "References (Nonmandatory), (b) Hazardous Substances Information."

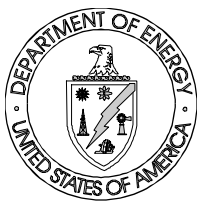
Scan the *American Conference of Government Industrial Hygienists Threshold Limit Values (ACGIH TLVs)* Booklet.

EXERCISE 2.3-D Discuss the respective applicability of overlapping or inconsistent requirements of 29 CFR 1910, Subpart Z, and the ACGIH TLV Booklet.

Scan 29 CFR 1910.1010, "Benzidine."

EXERCISE 2.3-E Using 29 CFR 1910.1010, "Benzidine," locate the section that defines the application.

EXERCISE 2.3-F Using 29 CFR 1910.1010, "Benzidine," locate the section that



defines the control measures for benzidine.

EXERCISE 2.3-G Using 29 CFR 1910.1010, "Benzidine," locate the section that defines the emergency response measures.

3. Summary

Knowledge of the *Code of Federal Regulations* and the *Federal Register* and how to use them are important to both the operational (production) and environmental aspects of DOE facility activities. They contain listings of the legal requirements that could impact organizational and individual liability.

4. Exercise Solutions

EXERCISE 2.3-A What is the significance of a chemical which is preceded by a "C?"

ANSWER 2.3-A The "C" indicates the Ceiling Value, and the exposure limit that is preceded by a "C" shall at no time exceed the exposure limit given for that substance.

EXERCISE 2.3-B Using 29 CFR 1910, Tables Z-1, 2, and 3, define ppm, mg/m³, and mppcf.

ANSWER 2.3-B ppm = concentration in parts per million (of contaminated air), mg/m³ = milligrams per cubic meter, and mppcf = millions of particles per cubic foot (of air).

EXERCISE 2.3-C Using 29 CFR 1910, Table Z-2, what is the Acceptable Maximum Peak (above the acceptable ceiling concentration for an 8-hour shift) for hydrogen sulfide?

ANSWER 2.3-C 50 ppm for 10 minutes once, and only if no other measurable exposure occurs.



Section 2.0

EXERCISE 2.3-D Discuss the respective applicability of overlapping or inconsistent requirements of 29 CFR 1910, Subpart Z, and the ACGIH TLV Booklet.

ANSWER 2.3-D Requirements listed in the CFR are the legal requirements, whereas the requirements listed in the ACGIH TLV are the recommended maximums. While the CFR requirements set the minimum requirements, for safety of personnel, if the ACGIH requirements are lower, they should be followed.

EXERCISE 2.3-E Using 29 CFR 1910.1010, "Benzidine," locate the section that defines the application.

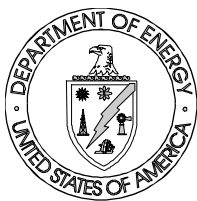
ANSWER 2.3-E (a) Scope and application, (1) This section applies to any areas in which Benzidine is manufactured, processed, repackaged, released, stored, or handled.

EXERCISE 2.3-F Using 29 CFR 1910.1010, "Benzidine," locate the section that defines the control measures for benzidine.

ANSWER 2.3-F Requirements for areas containing benzidine.

EXERCISE 2.3-G Using 29 CFR 1910.1010, "Benzidine," locate the section that defines the emergency response measures.

ANSWER 2.3-G (d) General regulated area requirements, (2) Emergencies.



Section 2.0

Competency 2.4 Occupational safety personnel shall demonstrate the ability to apply and implement occupational safety related sections and/or requirements of Orders, codes, standards, and regulations for a given industry, operation, facility, or hazard.

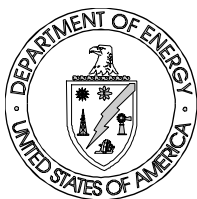
1. Supporting Knowledge and Skills

- Identify, locate, and implement the requirements of the applicable Orders, codes, standards, or regulations for a given work condition/situation or hazard(s).
- Discuss the role of job safety analyses, hazard analyses, and other safety review techniques in the implementation of occupational safety requirements.
- Discuss the requirements of a given Order, code, standard or regulation in terms of the impact on design, operation, maintenance, inspection, storage, testing, training, and reporting.
- Review the requirements in a given Order, code, standard or regulation and the need for developing a written program to implement the regulation.

2. Self-Study Activities (corresponding to the intent of the above competency)

- NOTES:
- The DOE Orders are in a state of transition. Please refer to the following gopher site for a cross reference of new and old Orders:
`gopher://VM1.HQADMIN.DOE.GOV:70/00/doemenu1/directiv/251cross.asc`
 - Below are three web sites containing many of the references you may need.

Web Sites		
Organization	Site Location	Notes
Department of Energy	http://cted.inel.gov/cted/index.html	DOE Standards, Guides, and Orders.
OSHA	http://www.osha-slc.gov/	OSHA documents and search engine
U.S. House of Representatives	http://law.house.gov/cfr.htm	Searchable Code of Federal Regulations



Section 2.0

NOTE: Competency 2.4 requires federal occupational safety professionals to demonstrate proficiency in applying and implementing regulations relevant to the needs of each facility's occupational safety program. To reflect the intent of the competency, the exercises focus on *process* rather than content. Apply those documents governing your facility's occupational safety program to the exercises provided below. Representative sample answers are provided in the Exercise Solutions section.

- EXERCISE 2.4-A Assume that you have responsibility for occupational safety for a construction site where excavation is a common activity. What reference materials might you require to adequately provide oversight for this activity? What DOE Order might provide a starting point to search for applicable orders and restrictions?
- EXERCISE 2.4-B List at least 20 of the most significant regulations, codes, and standards (federal, state, and local) governing your local occupational safety program?
- EXERCISE 2.4-C Discuss the role of job safety analyses, hazard analyses, and other safety review techniques in the implementation of occupational safety requirements.
- EXERCISE 2.4-D Identify an occupational safety issue relevant to your facility or site. Select a single Order, code, standard, or regulation and discuss the requirements of the selected standard as it applies to the following issues: design, operation, maintenance, inspection, storage, testing, training, and reporting. You may use the reference in completing the exercise. You may wish to use a matrix similar to the one provided.

Occupational Safety Regulatory Impact		
Reference:	Facility:	Requirement:
Function	Impact	
Design		
Operation		
Maintenance		
Inspection		
Storage		



Section 2.0

Occupational Safety Regulatory Impact		
Reference:	Facility:	Requirement:
Function	Impact	
Testing		
Training		
Reporting		

EXERCISE 2.4-E

Using the issue and references from Exercise 2.4-C, review the requirements of the relevant orders, standards, and so forth, and discuss the need for developing a written program to implement the regulation.

3. Summary

This competency requires the occupational safety specialist to maintain a familiarity with the controlling documents for their site/facility and speciality within the field of occupational safety and to demonstrate the ability to audit or assess a contractor's adherence to them. Federal occupational safety personnel should use process tools such as those provided in the self-study activities to assist in identifying the facility's controlling documents and in evaluating the impact of those documents.

DOE Order 5000.3B, *Occurrence Reporting and Processing of Operations Information*, requires investigation and reporting of occurrences and the selection, implementation, and follow-up of corrective actions. The level of effort expended should be based on the significance of the occurrence. DOE Guideline, DOE-NE-STD-1004-92, *Root Cause Analysis Guidance Document*, provides assistance in meeting this requirement and also in applying basic analysis procedures. Table 1, Summary of Root Cause Methods, on page 11 of the guideline, provides a convenient matrix to use in determining the appropriate method for performing occupational safety or other analyses.



4. Exercise Solutions

EXERCISE 2.4-A Assume that you have responsibility for occupational safety for a construction site where excavation is a common activity. What reference materials might you require to adequately provide oversight for this activity? What DOE Order might provide a starting point to search for applicable orders and restrictions?

ANSWER 2.4-A Title 29 CFR 1926, *Safety and Health Regulations for Construction*.

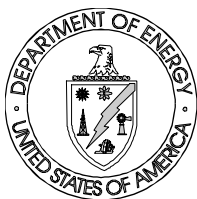
DOE Order 5480.4, *Environmental Protection, Safety, and Health Protection Standards*, specifies and provides requirements for the application of the mandatory environmental protection, safety, and health (ES&H) standards applicable to all DOE and DOE contractor operations.

EXERCISE 2.4-B List at least 20 of the most significant regulations, codes, and standards, (federal, state, and local) governing your local occupational safety program?

ANSWER 2.4-B This answer will be specific to your site. Confirm your answer with other occupational safety professionals at your facility. You should have included some or all of the following:

- 29 CFR 1910, *Occupational Safety and Health Standards*
- 29 CFR 1926, *Safety and Health Regulations for Construction*
- DOE Order 1540.2, *Hazardous Material Packaging for Transport - Administrative Procedures*
- DOE Order 3790.1B, *Federal Employee Occupational Safety and Health Program*
- DOE Order 5480.4, *Environmental Protection, Safety, and Health Protection Standards*

EXERCISE 2.4-C Discuss the role of job safety analyses, hazard analyses, and other safety review techniques in the implementation of occupational safety requirements.



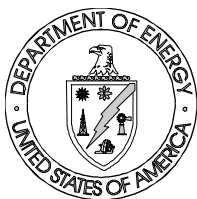
Section 2.0

ANSWER 2.4-C Aside from the regulatory requirements of 29 CFR 1910.120 and others, good practice would dictate the use of job safety analyses, hazard analyses, and other safety review techniques in the implementation of occupational safety requirements. It is not possible to eliminate hazards from a worksite without first identifying the hazards. The first stage in any good occupational safety program is to conduct job safety and hazard analyses to support the design of the program.

EXERCISE 2.4-D Identify an occupational safety issue relevant to your facility or site. Select a single Order, code, standard or regulation and discuss the requirements of the selected standard as it applies to the following issues: design, operation, maintenance, inspection, storage, testing, training, and reporting. You may use the reference in completing the exercise. You may wish to use a matrix similar to the one provided.

ANSWER 2.4-D Your answer will vary depending upon the issue you have chosen to address. A representative example is provided in this chart.

Occupational Safety Regulatory Impact		
Reference: DOE Order 3790.1B, VII,5.(c)1	Facility: Example	Requirement: Respiratory protection program control measures
Function	Impact	
Design	Written procedures are required for the selection and use of respirators. Proper selection of respirators is required. Other requirements stated in the reference make it clear that a formal policy and procedure must be formulated to ensure that the required issues are addressed.	
Operation	Where practical, respirators are to be assigned to individual workers.	
Maintenance	Regular cleaning and disinfecting (at least after each use) are required for respirators.	
Inspection	Inspection and maintenance (during cleaning for routinely used equipment and monthly for emergency equipment) is required. Additionally, inspection and evaluation of program effectiveness is required.	
Storage	Storage must be in a clean, sanitary location.	
Testing	Not addressed.	
Training	The reference requires that the users be trained on the use of respirators.	



Section 2.0

Occupational Safety Regulatory Impact		
Reference: DOE Order 3790.1B, VII,5.(c)1	Facility: Example	Requirement: Respiratory protection program control measures
Function	Impact	
Reporting	The reference requires that inspection and evaluation of program effectiveness be done, as well as surveillance of work area conditions, and inspection and maintenance of the respirators.	

EXERCISE 2.4-E Using the issue and references from Exercise 2.4-C, review the requirements of the relevant Order, standard, code, or regulation, and discuss the need for developing a written program to implement it.

ANSWER 2.4-E Your answer will vary depending upon the issue you have selected in your exercise; however, consider the analysis chart provided in deciding whether a written program is necessary to implement the requirement.

Cost-Benefit Analysis of Regulatory Compliance	
Factor	Issues
Importance	What is the consequence of error? What are the potential hazards and results that could occur if the requirement is not met? Particular emphasis is placed upon the likely effect upon the safety of the public, workers, and the environment.
Frequency	What is the frequency of occurrence of the activity or safety issue being addressed? Activities that occur infrequently may result in personnel being unfamiliar with the proper safety precautions and procedures and may therefore be more likely to result in error.
Difficulty	How difficult is the activity to perform safely? How likely is an individual to err in the normal course of performing the activity? Difficult activities, especially if performed infrequently, are good subjects for formal, written programs. In these cases, the use of checklists, scheduled reviews and maintenance activities, and formal evaluations and assessments may be warranted.



Section 2.0

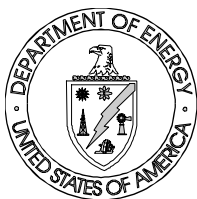
Cost-Benefit Analysis of Regulatory Compliance	
Factor	Issues
Cost-Benefit	What is the cost of implementing a written program to address the requirement? This should be a final consideration after weighing the first three. It is a cost-benefit analysis that balances the cost of a formalized written program against the possibility and consequence of error in its absence. DOE's policy is to protect the public, workers, and the environment, so this should be the final and least significant factor in making your decision.



Competency 2.5 Occupational safety personnel shall demonstrate the ability to oversee contractor safety programs and determine the adequacy of local compliance with the occupational safety-related requirements of Orders, codes, standards, and regulations.

1. Supporting Knowledge and Skills

- a. Discuss what constitutes an acceptable contractor occupational safety program consistent with the applicable safety requirements in terms of program performance and workplace compliance.
- b. Discuss the planning and preparation required to perform oversight assessments such as scheduling and the review of the following:
 - Contract documents
 - Previous assessment reports/action plans
 - Injury/illness statistics
 - Employee concern records
 - Other performance indicators
 - Approved exemptions
- c. For a given workplace scenario, assess contractor compliance with applicable safety requirements.
- d. Discuss the methods of evaluating a safety program in terms of program and documentation review, workplace inspections, and employee interviews and describe the role and appropriate application and mix of each of these methods in evaluating the effectiveness of a contractor's occupational safety program.
- e. Given data from an assessment, analyze the results to determine the effectiveness and adequacy of the contractor's occupational safety program.
- f. Given the results from an analysis of contractor compliance or non-compliance, document the results and communicate the results to contractor and Department line management.
- g. Discuss assessment followup actions including followup inspections, hazard abatement plans and activities, and updated performance goals and measures.



Section 2.0

2. Self-Study Activities (corresponding to the intent of the above competency)

- NOTES:
- The DOE Orders are in a state of transition. Please refer to the following gopher site for a cross reference of new and old Orders:
gopher://VM1.HQADMIN.DOE.GOV:70/00/doemenu1/directiv/251cross.asc
 - Below are three web sites containing many of the references you may need.

Web Sites		
Organization	Site Location	Notes
Department of Energy	http://cted.inel.gov/cted/index.html	DOE Standards, Guides, and Orders.
OSHA	http://www.osha-slc.gov/	OSHA documents and search engine
U.S. House of Representatives	http://law.house.gov/cfr.htm	Searchable Code of Federal Regulations

Read the study guide summary section below.

Scan each of the following references:

DOE Order 5483.1A, *Occupational Safety and Health Program for DOE Contractor Employees at Government-Owned, Contractor-Operated Facilities*

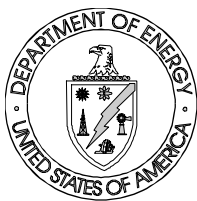
29 CFR Part 1910, *Occupational Safety and Health Standards*

EXERCISE 2.5-A Using DOE Order 5483.1A, discuss the requirements that constitute an acceptable contractor occupational safety program.

EXERCISE 2.5-B Discuss the planning and preparation required to perform oversight assessments.

EXERCISE 2.5-C Using 29 CFR 1910, review the following workplace scenario and perform the following activities:

- (a) Identify the OSHA requirement(s) that were violated and state the CFR reference location.
- (b) List at least three lessons learned from this scenario.



Scenario

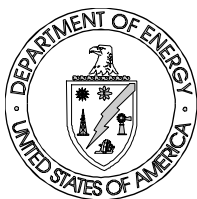
A forklift operator working in a storage facility was maneuvering the forklift down an aisle and into a bulk storage area. The 15-foot aisle had only 7½ feet of clearance because both sides of the aisle were being used for storage.

The forklift was carrying two spools of copper wire that were large enough to block the operator's view. Established procedures require that a vehicle with an obstructing load be backed into place, allowing the operator a clear view. Despite his impaired visibility, however, the operator did not back the forklift down the narrow aisle because the forklift's load was precariously balanced and because he wanted to watch the load as he drove.

While the forklift was moving down the aisle, a platform lift was being used to relocate material to a temporary staging area along the side of the aisle. The platform lift operator was standing in the aisle when the forklift collided with the platform lift. One of the forklift tines struck the platform lift operator, resulting in a broken leg. The platform lift and the forklift's skids absorbed most of the impact, and the forklift was able to stop before a more serious injury could occur. (Derived from *Occupational Safety Observer*, U.S. Department of Energy, Office of Safety and Health, Vol. 2, No. 11, November 1993.)

EXERCISE 2.5-D Develop a matrix, such as the one shown below, that describes the methods of evaluating a safety program in terms of program and documentation review, workplace inspections, and employee interviews.

Assessment Methods	
Method	Description
Workplace Inspections	
Employee Interviews	
Program and Documentation Review	



Section 2.0

EXERCISE 2.5-E

Develop a matrix, such as the one shown in Exercise 2.5-E in Section 2 of this self-study guide, that describes assessment follow-up actions in terms of corrective action plan reviews, follow-up inspections, and updated performance goals and measures.

Assessment Follow-Up Actions		
Step	Action	Description
1	Corrective action plan review	
2	Follow up inspections	
3	Updated performance goals and measures	

3. Summary

Oversight of contractor safety programs requires knowledge and skills in program requirements, oversight responsibility and planning, methods, approach, and follow-up. A short summary of each is offered below.

Program Requirements

DOE Order 5483.1A, *Occupational Safety and Health Program for DOE Contractor Employees at Government-Owned, Contractor-Operated Facilities*, identifies the requirements that constitute an acceptable contractor occupational safety program. In such a program, the contractor is required to:

- Furnish to contractor employees, with employment and a place of employment that are as free from occupational safety and health hazards as possible.
- Establish and implement programs and procedures in support of DOE Order 5483.1A to ensure that:
 - There is meaningful contractor employee participation in all aspects of the occupational safety and health program.
 - All new and existing equipment, materials, facilities, and operations, as well as all



Section 2.0

modifications, or additions to existing facilities comply with DOE-prescribed OSHA standards.

- The workplace is monitored for and records are maintained of known toxic substances and harmful physical agents that are used or produced at the GOCO facility.
- Availability and maintenance of, requests for changes to, and requests for variances or exceptions from the DOE-prescribed OSHA standards are in accordance with Chapter I of DOE Order 5483.1A.
- Contractor employees are fully informed of their rights, protections, obligations, and responsibilities as required by Chapter I of DOE Order 5483.1A.
- Compliance inspections are conducted in GOCO facilities using the inspection procedures of Chapter I of DOE Order 5483.1A as general guidelines.
- Contractor employee safety and health complaints are investigated promptly and resolved equitably according to the requirements of Chapter II of DOE Order 5483.1A.
- Contractor employees who exercise their rights under DOE Order 5483.1A are not discriminated against, as required by Chapter III.
- Occupational safety and health records and information are maintained and posted as prescribed by Chapter III of DOE Order 5483.1A.
- Accident investigations are conducted as required by Chapter III of DOE Order 5483.1A.

Oversight Responsibility

The creation and maintenance of the contractor safety and health program is the responsibility of contractor management. Oversight of that function is the responsibility of DOE personnel. One method of performing the oversight function is through the use of assessments.

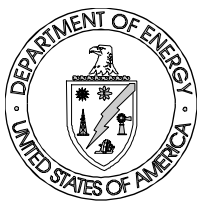
Assessment Planning

The following list is not all inclusive; however, it does list primary tasks that should be performed in the planning and preparation phase of oversight assessments.

1. For announced assessments, ensure that the contractor has been notified of the assessment schedule.
2. Ensure that necessary logistical arrangements are made.
3. Establish the criteria to be used as a basis for conducting the assessment.
4. Acquire advance copies of procedures, policies, contract documents, previous assessment reports/action plans, injury/illness statistics, employee concern records, other performance indicators, approved exemptions, accident reports, rosters, phone lists, etc.
5. Gather information pertinent to the assessment by reviewing advance materials.
6. Identify key contractor employees to be interviewed and work practices to be observed.



Section 2.0



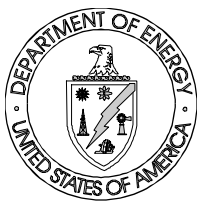
Assessment Methods

Once into the assessment itself, there are several key methods of evaluating a safety program:

Assessment Methods	
Method	Description
Workplace Inspections	Well-planned inspections of the workplace can provide information necessary to assess adequacy of the safety program. This activity may include observations of personnel performing duties, workplace material conditions, housekeeping, or other activities that relate to the objectives of the assessment.
Employee Interviews	Interviews provide a key source of information to assess adequacy or compliance status of safety programs. Interviews frequently provide keys to program communication or implementation problems.
Program and Documentation Review	Data review provides a significant amount of the information needed to assess compliance or status of safety programs. Documentation reviewed in this process can include procedures, policies, contract documents, previous assessment reports/action plans, injury/illness statistics, employee concern records, other performance indicators, approved exemptions, accident reports, rosters, phone lists, etc. Reviews in this area are done to confirm the existence and content of programmatic pieces of the safety program.

Preferred Assessment Approach

The primary approach to assessments should be to take a performance-based approach. This approach places primary emphasis on activities and less on programmatic aspects. Both are still assessed, but the focus of the assessments typically start with indications of problems and work backwards to determine the root cause. The most appropriate mix of these three types of assessment methods described above varies based on the situation; however, recent departmental activities tend toward performance-based assessments, and therefore, towards increased inspections and reduced documentation reviews.



Assessment Follow-Up Actions

Follow-up activities are very important to the oversight function. Responsibility for performing follow-up actions varies widely. The following list, however, addresses some of the standard follow-up actions that should be performed.

Assessment Follow-Up Actions		
Step	Action	Description
1	Corrective action plan review	The contractor should develop a plan for correcting the safety or health hazards identified in the assessment report. The plan should be reviewed for the likelihood of the actions correcting the problem. Negotiations may be required with the contractor to reach consensus on acceptable actions.
2	Follow up inspections	Once the actions of the corrective action plan have been completed, a follow-up inspection should occur. There are several purposes for this inspection. <ul style="list-style-type: none">• To verify that the corrective action plan was followed• To determine whether the initial problem was corrected• To ensure that the corrective actions have not made the initial problem worse or created a new problem
3	Updated performance goals and measures	A review of the current performance goals should be conducted to determine if revisions are needed due to this problem. Performance measures should also be reviewed for the same reason as well as to see if the corrective actions performed adversely any items measured.



4. Exercise Solutions

EXERCISE 2.5-A Using DOE Order 5483.1A, discuss the requirements that constitute an acceptable contractor occupational safety program.

ANSWER 2.5-A The contractor is required to:

- Furnish to contractor employees, with employment and a place of employment that are as free from occupational safety and health hazards as possible.
- Establish and implement programs and procedures in support of DOE Order 5483.1A to ensure that:
 - There is meaningful contractor employee participation in all aspects of the occupational safety and health program.
 - All existing equipment, materials, facilities, and operations are in compliance with DOE-prescribed OSHA standards.
 - All equipment and materials which are to be procured and all new facilities, modifications, or additions to existing facilities comply with DOE-prescribed OSHA standards.
 - The workplace is monitored for, and records maintained of, known toxic substances and harmful physical agents which are used or produced at the GOCO facility.
 - Availability and maintenance of, requests for changes to, and requests for variances or exceptions from the DOE-prescribed OSHA standards are in accordance with Chapter I of DOE Order 5483.1A.
 - Contractor employees are fully informed of their rights, protections, obligations, and responsibilities as required by Chapter I of DOE Order 5483.1A.
 - Compliance inspections are conducted in GOCO facilities using the inspection procedures of Chapter I of DOE Order 5483.1A. as general guidelines.
 - Contractor employee safety and health complaints are investigated promptly and resolved equitably according to the requirements of Chapter II of DOE Order 5483.1A.
 - Contractor employees who exercise their rights under DOE Order 5483.1A are not discriminated against, as required by Chapter III.



Section 2.0

- Occupational safety and health records and information are maintained and posted as prescribed by Chapter III of DOE Order 5483.1A.
- Accident investigations are conducted as required by Chapter III of DOE Order 5483.1A.

EXERCISE 2.5-B

Discuss the planning and preparation required to perform oversight assessments.

ANSWER 2.5-B

The following list is not all inclusive; however, it does list several of the primary tasks that should be performed in the planning and preparation phase of oversight assessments.

- For announced assessments, ensure that the contractor has been notified of the assessment schedule
- Ensure that necessary logistical arrangements are made
- Establish the criteria to be used as a basis for conducting the assessment
- Acquire advance copies of procedures, policies, contract documents, previous assessment reports/action plans, injury/illness statistics, employee concern records, other performance indicators, approved exemptions, accident reports, rosters, phone lists, etc.
- Gather information pertinent to the assessment by reviewing advance copies of materials
- Identify key contractor employees to be interviewed and work practices to be observed

EXERCISE 2.5-C

Using 29 CFR 1910, review the following workplace scenario and perform the following activities:

- (a) Identify the OSHA requirement(s) that were violated and state the CFR reference location.
- (b) List at least three lessons learned from this scenario.

NOTE: See the scenario under EXERCISE 2.5-C above under Section 2, Self-Study Activities.



ANSWER 2.5-C

- (a) At least the following OSHA requirements were violated:
- 29 CFR 1910.178(n)(4) -- "If the load being carried obstructs forward view, the driver shall be required to travel with the load trailing."
 - 29 CFR 1910.178(n)(4) -- requires that forklift operators "slow down and sound the horn at cross aisles and other locations where vision is obstructed."
 - 29 CFR 1910.176(a) -- requires that aisles used by mechanical equipment be kept clear.
- (b) At least three valid items should be identified. Below is a list of lessons learned. Others may also be valid.
- Established operating procedures require that a forklift be backed to its destination whenever forward visibility is obstructed. When possible, forklifts should not carry loads that will obscure the operator's line of sight.
 - Aisles should always be left unobstructed. In this case, using the aisle for storage contributed to the circumstances that placed the worker in the forklift's path.
 - Aisles should not be used as staging areas. In this instance, using the aisle to assemble material for relocation further restricted movement in an already crowded area. Remove all materials that might obstruct aisles to designated staging areas.
 - Management should consider using audible alarms and flashing lights on forklifts, although it should be noted that OSHA does not require these devices on forklifts operated in a warehouse. If a warehouse experiences heavy forklift traffic, audible alarms may become part of the normal background noise, making them ineffective.
 - Forklift operators are required to receive training that includes safe operating procedures. Management should consider periodic refresher training in this area.

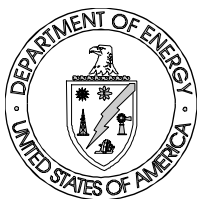
EXERCISE 2.5-D

Develop a matrix, such as the one shown in Exercise 2.5-D in Section 2 of this self-study guide, that describes the methods of evaluating a safety program in terms of program and documentation review, workplace inspections, and employee interviews.



ANSWER 2.5-D

Assessment Methods	
Method	Description
Workplace Inspections	Well-planned inspections of the workplace can provide information necessary to assess adequacy of the safety program. This activity may include observations of personnel performing duties, workplace material conditions, housekeeping, or other activities that relate to the objectives of the assessment.
Employee Interviews	Interviews provide a key source of information to assess adequacy or compliance status of safety programs. Interviews frequently provide keys to program communication or implementation problems.
Program and Documentation Review	Data review provides a significant amount of the information needed to assess compliance or status of safety programs. Documentation reviewed in this process can include procedures, policies, contract documents, previous assessment reports/action plans, injury/illness statistics, employee concern records, other performance indicators, approved exemptions, accident reports, rosters, phone lists, etc. Reviews in this area are done to confirm the existence and content of programmatic pieces of the safety program.



Section 2.0

EXERCISE 2.5-E Develop a matrix, such as the one shown in Exercise 2.5-E in Section 2 of this self-study guide, that describes assessment follow-up actions in terms of corrective action plan reviews, follow-up inspections, and updated performance goals and measures.

ANSWER 2.5-E

Assessment Followup Actions		
Step	Action	Description
1	Corrective action plan review	The contractor should develop a plan for correcting the safety or health hazards identified in the assessment report. The plan should be reviewed for the likelihood of the actions correcting the problem. Negotiations may be required with the contractor to reach consensus on acceptable actions.
2	Follow up inspections	Once the actions of the corrective action plan have been completed, a follow-up inspection should occur. There are several purposes for this inspection. <ul style="list-style-type: none">• To verify that the corrective action plan was followed• To determine whether the initial problem was corrected• To ensure that the corrective actions have not made the initial problem worse or created a new problem
3	Updated performance goals and measures	A review of the current performance goals should be conducted to determine if revisions are needed due to this problem. Performance measures should also be reviewed for the same reason as well as to see if the corrective actions performed adversely affected any items measured.